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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/719,101	02/23/01	ROLLAT-CORVOL	I 05725.0807

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HM22/0522

EXAMINER

WILLIS, M

ART UNIT

PAPER NUMBER

1619

DATE MAILED:

05/22/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

<p align="center"><b>Office Action Summary</b></p>	<b>Application No.</b> 09/719,101	<b>Applicant(s)</b> ROLLAT-CORVOL ET AL.	
	<b>Examiner</b> Michael Willis	<b>Art Unit</b> 1619	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 March 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 29 and 30 is/are rejected.
- 7) ☒ Claim(s) 6-28 and 31-37 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

- |                                                                                                               |                                                                              |
|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| 15) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 17) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>1</u> . | 20) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

Claims 1-37 are pending.

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Claim Objections***

2. Claims 6-28 and 31-37 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only and cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 1-5 and 29-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Regarding claim 1, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Additionally, the colon is confusing.

Art Unit: 1619

6. Claim 2 recites the broad recitation "Fmax > 3 Newton," and the claim also recites "preferably greater than 5 N," which is the narrower statement of the limitation. A broad limitation together with a narrow limitation that falls within the broad limitation in the same claim is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949).

7. Claim 29 is rejected for the improper use of "comprising" instead of "consisting of" in the Markush group of the claim. See MPEP § 2173.05(h) and *Ex parte Dotter*, 12 USPQ 382 (Bd. App. 1931). Claim 29 is also confusing in that it is unclear if "polymers based on a vinylpyrrolidone and vinylcaprolactam monomer" represents two distinct homopolymers or one copolymer requiring both vinylpyrrolidone and vinylcaprolactam monomeric components.

8. Claim 30 is rejected for being confusing. It is unclear how many distinct polymers are represented by "a dispersed polymer based on acrylic or methacrylic monomers and esters thereof and a polymer based on styrene monomers". Clarification is required whether the phrase represents a (meth)acrylic or (meth)acrylate polymer physically intermixed with a styrene homopolymer or whether the phrase represents a single copolymer comprised of (meth)acrylic, (meth)acrylate, and styrene monomers.

9. Any remaining claims are rejected for depending from an indefinite base claim.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lee et al (EP 0 551 749). Lee discloses a hair treatment composition comprising a water-insoluble polymeric resin and a water-soluble amphoteric polymer (see abstract; page 3, lines 6-50; and pages 7-8, claims 1-8). Preferred water-insoluble polymeric resins include polyesters functionalized with a sulpho group such as Eastman AQ polymers (see page 3, lines 15-20), meeting the limitation of a tacky polymer of the instant application. Acrylate-based copolymers to be used advantageously as the water-soluble amphoteric polymer of the disclosed composition include octylacrylamide/acrylates/butylaminoethyl methacrylate copolymers (see page 3, lines 30-37), meeting the limitation of a fixing polymer.

12. Claims 1, 29, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Grollier et al (US Pat. 4,402,977). Grollier discloses compositions for the treatment of keratin fibers based on amphoteric polymers and anionic polymers (see abstract; col. 1, line 49 through col. 2, line 22; and Examples 1-20). The compositions disclosed by Grollier include alkyl methacrylate monomers, vinylpyrrolidone monomers, and

vinylbenzene (aka styrene) monomers (see col. 2, line 23 through col. 6, line 68). While the reference is silent regarding glass transition temperatures, the polymers disclosed by Grollier would be expected to fall within the claimed range since the same polymers as claimed in the instant application can be expected to have the same inherent properties.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1-5 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myers et al (US Pat. 5,266,303) in view of Miller et al (WO 95/18191).

15. Myers teaches aerosol hair spray formulations. The formulations are comprised of a sulfonate-containing, water-dispersible linear polyester having a glass transition temperature of about 36° C and a water-soluble polyvinyl lactam polymer (see abstract and col. 2, line 30 through col. 3, line 14). The reference lacks polymers with a glass transition temperature of less than 20° C.

16. Miller teaches water-dispersible compositions comprising sulfonate-containing, water-dispersible branched polyesters having glass transition temperatures preferably less than 10° C (see page 3, line 22 through page 8, line 23; and page 18, lines 1-18).

Miller teaches that low Tg compounds are less brittle and more flexible than higher Tg compounds.

17. It would have been obvious to one of ordinary skill at the time the invention was made to have substituted branched sulfonate-containing polyesters for linear sulfonate-containing polyesters in hair spray compositions as taught by Myers in order to benefit from the decreased brittleness of the branched polymers as taught by Miller.

### **Conclusion**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Willis whose telephone number is (703) 305-1679. The examiner can normally be reached on Mon to Fri from 8:30 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diana Dudash can be reached on (703) 308-2328. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-2742 for regular communications and (703) 308-2742 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1234.

*Michael A. Willis*

Michael A. Willis, Ph.D.  
Patent Examiner  
May 16, 2001

  
**DIANA DUDASH**  
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